

December 1974

Velocity and depth readings were taken over mountain whitefish spawning beds in three streams. Eggs were most abundant in areas where the velocities varied from 1 to 2 feet per second and in depths of 0.5 to 2.0 feet. Size of gravels varied from 1/2 inch to 3 inches. The spawning beds were usually found within 50 to 100 feet of the crest of a riffle.

Location of whitefish spawning areas in Kootenai River was precluded by flows of about 15,000 cfs during the report period.

Mountain whitefish eggs from fish affected with gas bubble disease from Fisher River and eggs from fish not affected with gas bubble disease from Hungry Horse Reservoir were collected and held in the Flathead Lake salmon hatchery. Mortality rates of the Fisher River eggs were much higher than the Hungry Horse eggs. Mortality following "eye-up" was 67 percent for Fisher River and 2 percent for Hungry Horse. Mortality three weeks after "eye-up" was 88 percent for Fisher River eggs and 8 percent for Hungry Horse eggs.

It was noted that most of the dead eggs from Hungry Horse were opaque in color while most dead eggs from Fisher River were clear with no embryonic development. This may indicate that gas bubble disease affects semen performance and viability for egg fertilization.

Scales collected from whitefish and rainbow trout from Kootenai River were aged. Tags returned by anglers fishing Kootenai River were recorded and population data listings were sent to Helena for key punching.

Live-cars and light boards for electrofishing were repaired and constructed. Equipment was repaired, cleaned and stored for the winter. Meetings attended included Libby Lions Club and sportsmen meetings. One regional personnel meeting in Kalispell was attended.